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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,702	10/31/2003	Kotoyoshi Murakami	740613-139	8367
22204	7590	01/04/2006	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			MARC, MCDIEUNEL	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,702

Applicant(s)

MURAKAMI, KOTOYOSHI

Examiner

McDieunel Marc

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) all is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-10 are presented for examination.

Oath/Declaration

2. Receipt is acknowledged of papers filed under 35 U.S.C. 119 (a)-(d) based on an application filed on 4/7/2004. Applicant has not complied with the requirements of 37 CFR 1.63(c), since the oath, declaration or application data sheet does not acknowledge the filing of any foreign application. A new oath, declaration or application data sheet is required in the body of which the present application should be identified by application number and filing date.

The oath/declaration does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

The patent copy provided on 10/31/2003 does not have a ribbon properly attached.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto et al. (U.S. Pat. No. 6,227,432 B1) in view of Harden et al. (U.S. Pat. No. 4,252,587).

As per claims 1 and 6, Enomoto et al. teaches a system and an associated method including “ Friction Agitation Jointing Method of Metal Workpieces” which equates to a friction agitation processing method of processing a workpiece by penetrating a processing tool into the workpiece keeping rotation and removing the processing tool from the workpiece after friction agitation processing (see figs. 1, 2, 3A, 6A, 7A, 8(A-B)), said friction agitation processing method comprising the steps of:

processing tool in execution of the friction agitation processing; executing a removal of the processing tool from the workpiece at appearance rotation of the processing tool after said removal of the processing tool from the workpiece (see col. 5, line 65 – to – col. 6, line -40). Enomoto et al. does not teach providing an emergency stop demand signal for demanding a stop for stopping; detection means.

However, Harden et al. teaches a friction welding having the limitation of an emergency stopping of the machine which equates an emergency stop demand signal

for demanding a stop for stopping; Harden et al. also teach (e) and means responsive to a predetermined axial movement of the said flanges after they contact the ends of the sleeve for instantly stopping the rotation of the mandrels, and for then effecting a reversal of the fluid pressure thereon to cause retraction thereof (see col. 12, step (e)), which implies detection means.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the welding type of Enomoto et al. with the welding type of Harden et al., because this modification would have enhanced Enomoto' s et al. welding in order to provide instant stopping of the rotation of the tool, thereby improving the efficiency and the stopping function of the friction agitation process.

As per claims 2, 7 and 10, Enomoto et al. teaches a system and an associated method, wherein said removal of the processing tool from the workpiece is executed after a finishing time of scheduled friction agitation processing (see fig. 8B, which meets the above limitation pictorially).

As per claim 3, Harden et al. teaches in combination with Enomoto et al. a method, wherein said rotation of processing tool is stopped after a lapse of a predetermined period of time (see Harden' s et al. col. 7, lines 33-39), note that lapse has been considered as delay.

As per claims 4 and 5, Enomoto et al. teaches a method, wherein the processing tool is mounted to and positioned with respect to the workpieces by an automatic machine adapted to stop coincidentally with a stop of rotation of the processing tool (see fig. 1).

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6. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto et al. in view of Harden et al. as applied to claims 6-7 above, and further in view of **Shimogama** (U.S. Pat. No. 5,903,123).

As per claim 8, Enomoto et al. in view of Harden et al. teach essential features of the invention substantially as claimed, but they do not specifically teach a system wherein the processing tool is enclosed by a safety fence provided with a door and electromagnetic lock means for locking and unlocking the door, said electromagnetic lock means keeping said door locked until said finishing time.

Shimogama teaches an emergency stop circuit for a robot having a safety fence which has a door (see fig. 1 and col. 1, lines 45-56), which equates to a system wherein the processing tool is enclosed by a safety fence provided with a door and electromagnetic lock means for locking and unlocking the door, said electromagnetic lock means keeping said door locked until said finishing time.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the welding type of Enomoto et al. and welding type of Harden et al., with the robot type of Shimogama, because this modification would have enhanced Enomoto' s et al. and Harden' s et al. welding in order by introducing the safety fence, thereby improving the efficiency and the safety function of the friction agitation process.

As per claim 9, Enomoto et al. teaches a system wherein said processing tool is mounted to and positioned with respect to the workpieces by an automatic machine adapted to stop coincidentally with a stop of rotation of the processing tool (see figs. 1, 2, 3A, 6A, 7A, 8(A-B) as noted above).

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to McDieunel Marc whose telephone number is (571) 272-6964. The examiner can normally be reached on 6:30-5:00 Mon-Thu.

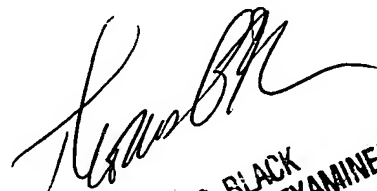
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


McDieunel Marc

Monday, December 19, 2005

MM/


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3600